U.S. Department of Agriculture
Forest Service
333 SW 1st Avenue, P.O. Box 3623
Portland, OR 97208

U.S. Department of the Interior
Bureau of Land Management
333 SW 1st Avenue, P.O. Box 2965
Portland, OR 97208

June 2003

Draft Supplemental Environmental Impact Statement

Management of Port-Orford-Cedar in Southwest Oregon

Coos Bay, Medford, and Roseburg Bureau of Land Management Districts and the Siskiyou National Forest in Southwest Oregon

Lead Agencies: Bureau of Land Management – U.S. Department of the Interior
Forest Service Region 6 – U.S. Department of Agriculture

Cooperating Agency: Forest Service Region 5, U.S. Department of Agriculture

Responsible Officials: Elaine Marquis-Brong, State Director, BLM Oregon & Washington
Linda Goodman, Regional Forester, Forest Service Region 6

Information Contact: Ken Denton, Port-Orford-cedar SEIS Team
P.O. Box 2965, Portland, OR 97208
503- 326-2368

Send comments to: Port-Orford-cedar SEIS Team
P.O. Box 2965
Portland, OR 97208

or e-mail to:
ORPOCEIS@or.blm.gov

Comments must be received by September 12, 2003.

Reviewers should provide their comments during the review period of the draft environmental impact statement. This will enable the Agencies to analyze and respond to the comments at one time and to use information acquired in the preparation of the final environmental impact statement, thus avoiding undue delay in the decision-making process. Reviewers have an obligation to structure their participation in the National Environmental Policy Act process so that it is meaningful and alerts the agency to the reviewer's position and contentions. Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 552 (1978). Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the final environmental impact statement. City of Angoon v. Hodel (9th Circuit, 1986) and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980). Comments on the draft environmental impact statement should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3)

United States Department of Agriculture	Forest Service	R-6	OR/ WA	Bureau of Land Management	United States Department of Interior

Reply Refer To: **3400 (FS)/ 5820 (BLM) (OR-935)** **Date: June 6, 2003**

Dear Reader:

This letter announces the release of the Draft Supplemental Environmental Impact Statement (SEIS) for Management of Port-Orford-cedar in Southwest Oregon.

Abstract: *The Coos Bay, Medford, and Roseburg Bureau of Land Management Districts and the Siskiyou National Forest are proposing to amend their respective Land and Resource Management Plans with standards and guidelines for the management of Port-Orford-cedar and the root disease - Phytophthora lateralis. The Draft SEIS considers five alternatives for maintenance of Port-Orford-cedar as an ecologically and economically significant species. Each alternative responds to the Purpose, to the degree such treatments are needed, practical, and cost-effective, of reducing disease introductions, slowing the spread of the disease where present, and/or mitigating the occurrence of the disease. Alternative 1 continues the current direction of implementing available disease-management practices based on site-specific analysis. Alternative 2 uses the same management practices but includes a risk key to clarify the environmental conditions that require implementation of site-specific practices. Alternative 3 includes all elements of Alternative 2, and adds additional protections for 32 currently uninfested 6th field watersheds. Alternative 4 removes existing disease management practices, but accelerates the resistant breeding program to provide resistant stock for all areas within 10 years. Alternative 5 also removes existing disease management practices, and stops development of resistant seed for remaining undeveloped breeding zones.*

Major issues include how effective would management practices be, what resources will be negatively affected by the cedar mortality, and how much restriction of other forest uses are necessary to reduce disease spread. In general, the more restrictive Alternatives 1, 2, and 3 improve conditions for water, fish, wildlife, rare plants, Tribal collections, and plant diversity, and adversely affect recreation access, special forest product collection, timber harvest, fire suppression and fuels management, and costs. The less restrictive Alternatives 4 and 5 have the opposite effect. A major finding of the analysis is that Port-Orford-cedar is not in danger of extirpation under any of the alternatives.

Preferred Alternative: *The preferred alternative is Alternative 2.*

A description of the Purpose, the alternatives considered in detail, and a brief summary of the environmental effects are included in the six-page Summary in the front of the SEIS. A copy of the SEIS and other related information is also available on the SEIS Team website at: http://www.or.blm.gov/planning/Port-Orford-cedar_SEIS/

The Agencies are soliciting comments on the Draft SEIS. Comments will be accepted via hardcopy mail or e-mail, and should be sent to:

Port-Orford-cedar SEIS Team
P.O. Box 2965, Portland, OR 97208

or:

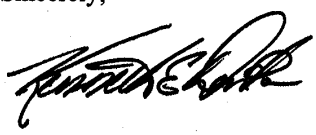
ORPOCEIS@or.blm.gov

The 90-day comment period begins on June 13, 2003, and closes on September 12, 2003. The Agencies ask that those submitting comments on the Draft SEIS make them as specific as possible with references to page numbers and chapters of the document. Comments should address the adequacy of the statement and the merits of the alternatives discussed (40 CFR 1503.3).

Comments received in response to this solicitation, including names and addresses, will be considered part of the public record on this proposal and are available for public inspection. Comments, including names and addresses, may be published as part of the Final SEIS. If you wish to withhold your name or address from public review, or from disclosure under the Freedom of Information Act (FOIA), you must state this prominently at the beginning of your written comments. Additionally, pursuant to 7 CFR 1.27(d), any person may request that submissions be withheld from the public record by showing how the FOIA permits such confidentiality. Persons requesting such confidentiality should be aware that under FOIA, confidentiality may be granted in only very limited circumstances, such as to protect trade secrets. The requester will be informed of the Agencies' decision regarding the request for confidentiality. Where the request is denied, the comments will be returned to the requester and the requester will be notified that the comments may be resubmitted with or without name and address. Comments submitted anonymously will be accepted and considered. Anonymous comments do not create standing or a record of participation. All submissions from organizations and business, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be available for public inspection in their entirety.

For further information on this SEIS, contact Ken Denton, Port-Orford-cedar SEIS Team, P.O. Box 2965, Portland, OR 97208; or via telephone at 503-326-2368.

Sincerely,



KENNETH E. DENTON
SEIS Team Leader
Port-Orford-cedar SEIS Team

Table of Contents

Chapter 3&4 — Affected Environment and Effects of Alternatives

Tables and Figures

Acronyms/Abbreviations

ACEC ~ Area of Critical Environmental Concern
BLM ~ Bureau of Land Management
CVS ~ Current Vegetation Survey
EA ~ Environmental Assessment
EIS ~ Environmental Impact Statement
FS ~ U.S. Forest Service
GIS ~ Geographic (mapping) Information System
LSR ~ Late-Successional Reserve
NF ~ National Forest
NOAA Fisheries ~ National Oceanic & Atmospheric Administration-Fisheries (formerly NMFS-National Marine Fisheries Service)
NRA ~ National Recreation Area
POC ~ Port-Orford-cedar
PL ~ *Phytophthora lateralis*
RNA ~ Research Natural Area
RMP ~ Resource Management Plan
Region 6 ~ Forest Service Region covering Oregon and Washington
Region 5 ~ Forest Service Region covering California
SEIS ~ Supplemental Environmental Impact Statement
USFWS ~ U.S. Fish & Wildlife Service
U.S. ~ United States

Summary —

Introduction

This supplemental environmental impact statement (SEIS) presents the environmental consequences of five different strategies to manage Port-Orford-cedar (POC) in southwest Oregon. Each alternative is designed to meet the need for the maintenance of POC as an ecologically and economically significant species on Bureau of Land Management (BLM) and National Forest (NF) lands. Currently, direction in existing land and resource management plans places an emphasis on reducing the spread of POC root disease and maintaining POC through use of a wide variety of management practices generally applied at the project level following site-specific analysis. A proposal to prepare a SEIS to correct previous cumulative effects analysis deficiencies and consider other management alternatives for POC in the Oregon portion of its range was made public on February 10, 2003, through a Notice of Intent published in the *Federal Register* (68[27]:6709-6710). The Notice of Intent provided preliminary information about the proposed action and invited public comment.

The existing POC management direction was included in Agency land and resource management plans adopted in 1989 and 1995, with little visible analysis regarding how well that direction would work at the range-wide and long-term scales. The direction generally incorporates BLM or references Forest Service (FS) guidelines and policies directing development and application of all practicable management practices to control the spread of the root disease, and to develop disease-resistant trees through a breeding program to help replace trees lost to the disease.

Why is the Action Being Proposed?

In March, 2002 a decision by the U.S. Court of Appeals for the Ninth Circuit found that a BLM project-specific environmental analysis had not adequately considered cumulative effects to the health of POC over its entire range in view of reasonably foreseeable actions of the Agency and others. A follow-up decision by the U.S. District Court of the District of Oregon ruled that the EIS for the Coos Bay District resource management plan was inadequate under the "National Environmental Policy Act" (NEPA) because it did not include an analysis of reasonable foreseeable future timber sales and other actions on the root disease and POC. The court went on to enjoin timber sale activities and related road building and maintenance in the project area until

> . . . BLM completes adequate analysis of the direct, indirect, and cumulative impacts on *Phytophthora lateralis* and Port-Orford-cedar.

It's important to note that the court did not necessarily find a deficiency with the current management direction itself, only that the analysis supporting it was inadequate. This SEIS is intended to supply the missing analysis, and it follows that potential alternatives to the current direction need to be analyzed as well in order to provide a context, or range of effects, within which the decision-maker can consider the required analysis and make an informed choice.

What Would It Mean Not to Meet the Need?

To help address this question at least in regards to "no management", a passive management alternative was analyzed. This alternative has no special management for POC and its root disease and stops the existing resistance breeding program at its current level. Analysis indicates, however, that even this alternative would not lead to extirpation of POC or loss of unique genetic variations. There are other effects however. It appears that a fairly wide range of alternatives will meet the Need, although alternatives that are overly restrictive would not meet the Agencies multiple-use mandates. The analysis displays the positive and negative impacts of each alternative so the decision-makers can choose the one best meeting the purpose of supplying the most cost-efficient balance of positive and negative effects.

What Action is Proposed?

The Agencies propose to amend the land and resource management plans for the Coos Bay, Medford, and Roseburg BLM Districts and the Siskiyou National Forest by removing the existing direction for management of POC root disease and replacing it with the direction in Alternative 2. Alternative 2 describes all currently available control and mitigation practices, dividing them between those that should be applied generally and those that may, depending upon site conditions, be applied to specific management activities. For the latter group, a risk key is included to clarify the environmental conditions that require implementation of one or more of the listed disease-controlling management practices. The difference, when compared with the current direction, is implementation of a slightly broader, potentially more effective array of control or mitigation treatments, and more consistent implementation of those treatments based on the risk key. Alternative 2 is described in detail in Chapter 2.

Are There Other Alternatives that Would Meet the Need?

Yes. During the scoping phase for this project (February 10 through March 12, 2002) many comments were received both internally and externally. Commenters suggested various ideas for meeting the Need, and many of these are addressed in Chapter 2 under "Alternatives Considered, but Eliminated from Detailed Study". Several of the other submitted ideas were incorporated into alternatives considered in detail. The five alternatives considered in detail in this SEIS, including the current direction and the proposed action described above, are summarized in Table S-1.

What are the Effects of the Alternatives?

The environmental consequences of the five alternatives are discussed in detail in Chapter 3&4 and summarized on Table S-2. The most important finding of the analysis is probably that POC is not at risk of extirpation in any portion of its range. POC is at significant risk of root disease infection only on high risk sites. High risk sites are low-lying wet areas that are located downslope from already infested areas or below likely sites for future introductions, especially roads. They include streams, drainage ditches, gullies, swamps, seeps, ponds, lakes, and concave low-lying areas where water collects during rainy weather. (POC away

Table S-1.—*Summary of alternatives considered in detail*

Alternative	Project Analysis	Practices to be Applied	Resistance Breeding [1]
1 - Current Direction	Site-specific.	All known disease-control practices, as needed, and mitigation planting as available. Includes many not described in Standards and Guidelines.	Current level
2 - Proposed Action	Site-specific with risk key to guide analysis and set limits.	All known disease-control practices, as needed, and mitigation planting as available. Current practices are all described in Standards and Guidelines.	Current level
3	Site-specific with risk key to guide analysis and set limits.	All known disease-control practices, as needed, and mitigation planting as available. Current practices are all described in Standards and Guidelines. Also identifies 32 currently uninfested watersheds for further access limitations and no timber harvest in POC stands.	Current level
4	Site-specific only to determine where to use resistant stock.	Only planting of resistant stock where mortality has had the most adverse impact. No disease-control practices.	Accelerated level
5	Site-specific only to determine where to use existing resistant stock.	Only planting of existing resistant stock where mortality has had the most adverse impact. No disease-control practices.	Use existing developed sources only

[1] Current level will develop disease-resistance seed for all breeding zones within 45 years. Accelerated level will develop this same seed within 10 years. Use of existing developed sources only will maintain the existing seed orchard covering 5 of the 19 breeding zones in Oregon, but stop any further field identification of resistant parents and development of additional zones.

from such areas, or near streams or bodies of water, but whose roots do not extend below the high water mark for flooding, are at low risk of infection.)

There are approximately 272,000 acres containing POC in Oregon, with about 33 percent on high-risk sites (including 12 percent currently infested). The percent of the area in high-risk sites varies across the range, from 20 percent in the northwest where POC grows across the landscape, to 60 percent in the Inland Siskiyou region where POC is more concentrated in riparian areas. The management direction in the various alternatives would affect the percentage of high-risk sites that will become infested by the root disease. According to predictions detailed in the Pathology section of Chapter 3&4, the percentage of currently uninfested high risk areas that will become infested in the next 100 years is 40, 35, 20, 80, and 80 percent for Alternatives 1, 2, 3, 4, and 5, respectively. From these projections, and the POC acreage, percent in high-risk sites, and existing infestation rate, the acres and percent of area expected to be infested in 100 years under each alternative can be calculated (see Table S-2).

The various predicted root disease infestation rates and resultant POC mortality have "indirect" effects to various ecosystem processes and values that vary by alternative (see Table S-2). It is important to note that these indirect effects do not all occur at once, but occur over the next 100 years as the disease advances into new areas. There are also "direct" effects from the standards and guidelines themselves. Closing roads or prohibiting timber harvest directly affects forest users, outputs, and jobs. In general across the range of alternatives, as the negative direct effects increase, the negative indirect effects decrease, and vice versa (Table S-2).

Can Any of the Adverse Effects be Mitigated?

Chapter 2 includes a detailed discussion of possible mitigation measures for each of the potential and likely adverse effects identified in the SEIS. In particular, however, Alterna-

Table S-2.—***Summary and comparison of the environmental consequences (effects) of the alternatives***

Resource/topic	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Pathology	54,990 acres [20%] infested in 100 years, 61% of high-risk riparian.	52,120 acres [19%] infested in 100 years, 58% of high-risk riparian.	43,520 acres [16%] infested in 100 years, 49% of high-risk riparian.	77,930 acres [29%] infested in 100 years, 87% of high-risk riparian.	77,930 acres [29%] infested in 100 years, 87% of high-risk riparian.
Ecology	Losses in species diversity and ecological function in one or more of 64 identified plant associations where POC is a major component [prominent]; more of a concern in ultramafic soils where POC is a major component; effect by alternative is proportional to acres infested; no plant association is eliminated.				
Botany	There are probably benefits to some rare plants proportional to decreased infestation acres. Also Alternatives 1, 2, and 3 road closures reduce noxious weed introductions and trampling. However, some rare plants benefit when nearby cedars die. No negative effects to threatened and endangered plants are identified.				
Water and Fisheries	Increased temperature in ultramafic areas results in coho salmon [ESA listed] and steelhead loss, with some effect in all alternatives, increasing towards Alternatives 4 and 5. Less than 5% of coho spawn in ultramafic streams, but temperature increases affect other parts of the system. Alternatives 1, 2 and 3 possible localized mortality of salmonids from Clorox in fire suppression water drops.				
Wildlife	There are no species dependent upon POC, and no adverse effect on threatened and endangered species. Because pure stands are the exception, effects are minimal. In Alternative 3, late-successional forest-related wildlife benefits from reduced timber harvest, but reduced Late-Successional Reserve thinning could slightly reduce future habitat for these same species. Alternatives 1, 2, and 3 possible localized mortality of aquatic species from Clorox in fire suppression water drops.				
Genetics	POC survival in all alternatives is sufficient to avoid loss of common genes and prevent large-scale population divergence.				
Resistance	Good major gene resistance and early fruiting of POC, plus very limited genetic variability in the pathogen, predicts successful development of durable resistant stock for replanting infested areas				
	Stock available in all breeding zones within 45 years.			Stock available in all breeding zones in 10 years.	Stock limited to current level [26% of breeding zones].
Fire and Fuels	Increased suppression and fuel treatment costs about 2 percent [Alternative 3 slightly more]. Alternative 3 would reduce access to 60,000 acres and prohibit timber harvest on 2,300 acres of wildland-urban interface.			No costs associated with POC disease control [possible fuels increase associated with mortality is insignificant].	
Recreation, Visual, Wilderness, and Wild and Scenic Rivers	Negative effects to some users if roads and areas closed; greatest in Alternative 3. Positive effects to visuals, wilderness, and wild and scenic river values [esthetic] of reduced mortality.			No restrictions on access. Esthetic impacts increased.	No restrictions on access. Esthetic impacts increased.
	Resistance breeding mitigates esthetic impacts over time, fastest in Alternative 4; not all areas in Alternative 5.				
Cultural Products for Tribes	Insignificant difference between alternatives because of modest levels used and access on other lands.				
Special Forest Products	Current level [4% of bough market], plus firewood and other collections.	Current level of bough collection, and <5% reduction of firewood and other collections.	Current level of bough collection, and slightly more reduction in firewood and other collections than Alternative 2.	Increase of bough harvest by 100 to 200 tons, plus slight increase in firewood and other collections from current levels.	
Timber Harvest	Increase in cost to purchasers of about $0.80/thousand board feet.				
			Decrease in PSQ approximately 0.7 million board feet and no thinning in 2,300 Late-Successional Reserve acres.		
Direct Costs	$860,000	$846,000	$881,000	$477,000	$93,000
Environmental Justice	Current level	Slight job decrease	Job decrease includes 8 timber jobs	Job increase of 6 related to bough collection	
Note: The planning area includes 1.5 million acres of Federal lands and 272,000 acres with some level of POC stocking, 22,000 of which are infested with root disease.					

tives 1, 2, 3, and 4 include a resistance breeding program, and Alternative 5 would continue to use resistance stock in the 26 percent of the breeding zones for which it has already been developed. The Agencies expect the resistance breeding program to mitigate at least some, and potentially many, of the adverse indirect effects at least in the long term, as POC killed by the disease are gradually replaced by planted resistant stock and their offspring. Alternative 4 is scheduled to have seed for all breeding zones within 10 years, while Alternatives 1, 2, and 3 are scheduled to have seed for all zones within 45 years. Although there are long-term uncertainties in any resistance breeding program, the chance for durable resistance in POC is good because it appears to have major gene resistance, the disease itself has a very narrow genetic base indicating a low likelihood of it adapting to kill resistant trees, and POC begins to produce cones as early as age 5 which makes a rapid breeding program possible.

The first resistant POC will be field planted in the Biscuit Fire area in 2004, but even these will take several decades before they fulfill many of the ecological functions of their lost predecessors. The ability of resistant seedlings to mitigate disease losses will depend on Agency funding, time, and on where the Agencies use them. Fortunately, every dead tree need not be replaced by direct planting. POC's propensity for seed production at a young age means successful plantings of a few dozen resistant trees in an infested area should be sufficient to begin a cycle of natural regeneration of resistant or partially-resistant stock.

What Factors Will be Used in Making the Decision Between Alternatives?

The BLM State Director and the FS Regional Forester will decide which alternative best meets the underlying need for this proposal. In making the decision, they will also weigh how well each of the alternatives meets the following purpose:

To meet the Need for maintenance of POC as an ecologically and economically significant species on BLM and NF lands, the Agencies are seeking a management strategy that, to the degree such treatments are needed, practical, and cost-effective, reduces disease introductions, slows the spread of the disease where present, and/or mitigates the occurrence of the disease on POC. Cost-effectiveness is determined by:

- Whether the treatments themselves are practicable;
- whether factors outside the Agencies' control influence the effectiveness of specific measures;
- the significance of the role POC plays in aquatic and terrestrial ecosystems;
- the commercial value of POC; and
- weighing these benefits and factors against the costs of the treatment program.

Also, any strategy for controlling the disease must allow the Agencies to meet their multiple-use mandates, including:

- Providing access to POC products;
- avoiding unnecessary restrictions to public access and use;
- providing for continued extraction of a wide range of products;
- permitting fuel reduction and forest health treatments; and
- conducting fire suppression activities.

Reduced ability to meet these mandates will be considered as part of the costs of the treatment program.

What Monitoring is Necessary?

Monitoring is specified as part of each of the alternatives. Where applicable to the specific elements of an alternative, this monitoring includes tracking the success of the resistance breeding program, annual program summaries and evaluation reports, and incorporating POC management requirements in all regularly-scheduled project-implementation monitoring. Pathologists will continue to evaluate the effectiveness of existing root disease control techniques and help develop others. The Agencies will continue to maintain infestation maps and forest inventories to track progress of the disease.

Which Alternative is Preferred?

Based on consideration of the environmental consequences in the draft SEIS, Alternative 2 was found to best meet the Purpose and Need, and is the preferred alternative.